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EXAMINER	
SERRAO, RANODHI N	

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/735,590	JONES ET AL.	
	Examiner	Art Unit	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-87* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-87* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "111, 116, and 117" have been used to designate several items in figures 1 and 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 10, 11, 14-16, 21-43, 46, 50-52, 57-60, 65, 67-72, 76, 80-83, 85, 86, and 87, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillett, Jr. et al. (6,295,585) (referred to hereinafter as Gillett) and Wipfel et al. (6,151,688) (referred to hereinafter as Wipfel).

4. As per claim 1, Gillett teaches a plurality of connection interfaces (see Gillett, col. 7, lines 36-56). However, Gillett fails to teach a source device, comprising: a cluster manager configured to determine performance similarities for a plurality of connections and configured to group the plurality of connections into performance clusters based on the determined performance similarities. Wipfel teaches a source device (see Wipfel, col. 6, lines 42-55), comprising: a cluster manager configured to determine performance similarities for a plurality of connections (see Wipfel, col. 7, lines 43-55) and configured to group the plurality of connections into performance clusters based on the determined performance similarities (see Wipfel, col. 1, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a source device, comprising: a cluster manager configured to determine performance similarities for a plurality of connections and configured to group the plurality of connections into performance clusters based on the determined performance similarities in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

5. As per claim 21, Gillett teaches a network communication system, comprising: a plurality of destination devices, each of the plurality of destination devices comprising a destination synchronization mechanism and a destination data buffer (see Gillett, col. 7, line 57-col. 8, line 4 and col. 12, line 59-col. 13, line 2); and a source device comprising: a plurality of connection interfaces configured to support a plurality of connections with the plurality of destination devices (see Gillett, col. 5, lines 50-62). However, Gillett fails to teach a cluster manager configured to determine performance similarities for the

plurality of connections made via the plurality of connection interfaces and to group the plurality of connections into performance clusters based on the determined performance similarities. Wipfel teaches a cluster manager configured to determine performance similarities for the plurality of connections made via the plurality of connection interfaces (see Wipfel, col. 7, lines 43-55) and to group the plurality of connections into performance clusters based on the determined performance similarities (see Wipfel, col. 1, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a cluster manager configured to determine performance similarities for the plurality of connections made via the plurality of connection interfaces and to group the plurality of connections into performance clusters based on the determined performance similarities in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

6. As per claim 41, Gillett teaches a method for sharing data in a network communication system comprising: determining the performance similarities for a plurality of connections (see Gillett, col. 7, lines 36-56). But fails to teach grouping the plurality of connections into performance clusters based on the determined performance similarities. However, Wipfel teaches grouping the plurality of connections into performance clusters based on the determined performance similarities (see Wipfel, col. 1, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to grouping the plurality of connections into performance clusters based on the determined performance similarities in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

7. As per claim 57, Gillett teaches a source device, comprising: a plurality of connection interfaces (see Gillett, col. 7, lines 36-56). But fails to teach a cluster manager configured to: determine at least one of client service and resource priorities, determine the performance similarities for a plurality of connections made via the plurality of connection interfaces, and group the plurality of connections into performance clusters based on the determined performance similarities and the determined service and resource priorities. However, Wipfel teaches a cluster manager configured to: determine at least one of client service and resource priorities, determine the performance similarities for a plurality of connections made via the plurality of connection interfaces (see Wipfel, col. 7, lines 43-55), and group the plurality of connections into performance clusters based on the determined performance similarities and the determined service and resource priorities (see Wipfel, col. 1, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a cluster manager configured to: determine at least one of client service and resource priorities, determine the performance similarities for a plurality of connections made via the plurality of connection interfaces, and group the plurality of connections into performance clusters based on the determined performance similarities and the determined service and resource priorities in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

8. As per claim 65, Gillett teaches a source device comprising: a cluster manager configured to distinguish, from a set of connections, a subset of connections having similar performance capabilities (see Gillett, col. 2, lines 14-42). But fails to teach

configured to group the subset of connections together in a performance cluster. However, Wipfel teaches a subset configured to group the subset of connections together in a performance cluster (see Wipfel, col. 1, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a subset configured to group the subset of connections together in a performance cluster in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

9. As per claim 67, Gillett teaches a network communication system comprising: grouping each of the subsets in a distinct performance cluster (see Gillett, col. 2, lines 14-42). But fails to teach an intermediate source device, wherein the intermediate source device comprises: a cluster manager configured to: determine subsets of connections from a set of connections, wherein each connection in each subset has similar performance capabilities with the other connections in the same subset. However, Wipfel teaches an intermediate source device, wherein the intermediate source device comprises: a cluster manager configured to: determine subsets of connections from a set of connections, wherein each connection in each subset has similar performance capabilities with the other connections in the same subset (see Wipfel, col. 7, lines 43-55). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to an intermediate source device, wherein the intermediate source device comprises: a cluster manager configured to: determine subsets of connections from a set of connections, wherein each connection in each subset has similar performance capabilities with the other connections in the

same subset in order to improve computing system availability (see Wipfel, col. 2, lines 5-11).

10. As per claims 2-6, 10, 11, 14-16, 22-40, 42, 43, 46, 50-52, 58-60, 68-72, 76, 80-83, and 85-87 the above motivation to combine Gillett and Wipfel in claim 1 under 35 USC 103(a) (paragraph 4 above) applies fully.

11. As per claims 2, 22, 42, 58 and 68, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, 57, and 67 above but Wipfel fails to teach a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters. However, Gillett teaches a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters (see Gillett, col. 10, lines 14-29).

12. As per claims 3, 23, 43, 59, 69, and 85, Gillett and Wipfel teach the mentioned limitations of claims 1, 2, 21, 22, 41, 42, 57, 58, 67, 68, 80, 83 and 84 above but Wipfel fails to teach a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections (see Gillett, col. 15, lines 18-39).

13. As per claims 4, 24, 60, 70, and 86, Gillett and Wipfel teach the mentioned limitations of claims 1, 2, 3, 21, 22, 23, 57, 58, 59, 67, 68, 80, 83, and 84 above but Wipfel fails to teach a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces. However, Gillett teaches a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces (see Gillett, col. 12, line 59-col. 13, line 2).

14. As per claims 5, 25, 71, and 83, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 67, and 68 above but Wipfel fails to teach a source device, wherein the performance clusters include a high performance cluster. However, Gillett teaches a source device, wherein the performance clusters include a high performance cluster (see Gillett, col. 11, lines 61-65).

15. As per claims 6, 26, and 72, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, and 67 above but Wipfel fails to teach a source device, wherein the performance clusters include an intermediate performance cluster. However, Gillett teaches a source device, wherein the performance clusters include an intermediate performance cluster (see Gillett, col. 14, lines 56-67).

16. As per claims 7, 27, and 73, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, and 67 above but Gillett fails to teach a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections. However, Wipfel teaches a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections (see Wipfel, col. 7, lines 19-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections in order to provide a major advantage of clusters which is their support for heterogeneous nodes (see Wipfel, col. 1, lines 47-54).

17. As per claims 8, 28, 44, and 74, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, and 67 above but Gillett fails to teach a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill

in the art at the time of the invention to modify Gillett to a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

18. As per claims 9, 29, 45, and 75, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, and 67 above but Gillett fails to teach a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

19. As per claims 10, 30, 46, and 76, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, and 67 above but Wipfel fails to teach a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections (see Gillett, col. 15, lines 18-39).

20. As per claims 11, 31, 47, and 77, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, and 67 above but Wipfel fails to teach a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections (see Gillett, col. 6, lines 33-45).

21. As per claims 12, 32, 48, 63, and 78, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, 57, and 67 above but Gillett fails to teach a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities (see Wipfel, col. 8, lines 32-51). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities in order to provide a way to coordinate shared resource access when an interconnect fails without relying on a local area network or a serial link (see Wipfel, col. 3, line 64-col. 4, line 6).

22. As per claims 13, 33, 49, 64, and 79, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, 41, 57, and 67 above but Gillett fails to teach a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection (see Wipfel, col. 2, lines 12-21). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection in order to implement cost-effective solutions by using less reliable nodes and swap nodes out when they fail (see Wipfel, col. 2, lines 12-21).

23. As per claims 14, 34, 50, and 80, Gillett and Wipfel teach the mentioned limitations of claims 1, 2, 3, 4, 21, 22, 23, 24, 41, 42, 43, 67, and 68 above but Wipfel fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed. However, Gillett teaches a source device,

wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed (see Gillett, col. 12, line 59-col. 13, line 2).

24. As per claims 15, 35, 51, and 81, Gillett and Wipfel teach the mentioned limitations of claims 1, 2, 3, 4, 21, 22, 23, 24, 41, 42, 43, 67, and 68 above but Wipfel fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update (see Gillett, col. 13, line 66-col. 14, line 14).

25. As per claims 16, 36, 52, 82, and 87, Gillett and Wipfel teach the mentioned limitations of claims 1, 2, 3, 4, 21, 22, 23, 24, 41, 42, 43, 67, 68, and 83 above but Wipfel fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update. However, Gillett teaches a source device, wherein each of the plurality of

synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update (see Gillett, col. 12, line 59-col. 13, line 2).

26. As per claim 84, Gillett and Wipfel teach the mentioned limitations of claims 67, 68, and 83 above but Gillett fails to teach a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer. However, Wipfel teaches a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection (see Wipfel, col. 4, lines 26-46) and a remote source data buffer (see Wipfel, col. 12, lines 21-32). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett to a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer in order to reallocate sharable resources without interrupting work on all nodes (see Wipfel, col. 3, line 64-col. 4, line 6).

27. Claims 17, 18, 37, 38, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillett Jr. et al. (6,295,585) and Wipfel et al. (6,151,688) as applied to claim 1 above, and further in view of Kremien (20010034752).

28. As per claims 17, 37, and 53, Gillett and Wipfel teach the mentioned limitations of claims 1, 21, and 41 above but fail to teach a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections. However, Kremien teaches a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections (see Kremien, paragraph 0064). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett and Wipfel to a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections in order to enable centralized load balancing solution's their decision making by maintaining state information regarding all cluster members in one location. (see Kremien, paragraph 0009).

29. As per claims 18, 38, and 54, Gillett and Wipfel teach the mentioned limitations of claims 1, 17, 21, 37, 41, and 53 above but fail to teach a source device, wherein the cluster manager is further configured to group the plurality of connections into

performance clusters based on the average latency of each of the plurality of connections. However, Kremien teaches a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections (see Kremien, paragraph 0030). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett and Wipfel to a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections in order to provide a distributed load balancing system and method for resource management in a computer network (see Kremien, paragraph 0024).

30. Claims 19, 39, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillett Jr. et al. (6,295,585), Wipfel et al. (6,151,688), and Kremien (20010034752) as applied to claims 1, 17, 21, 37, 41, 53, and 54 above, and further in view of (Quarterman et al. (2002/0177910). Gillett Jr. et al., Wipfel et al., and Kremien teach the mentioned limitations of claims 1 and 17 above but fail to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance

cluster and standard deviation of the average latencies for each of the plurality of connections. However, Quarterman et al. teaches a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections (see Quarterman et al., paragraph 0158); determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster (see Quarterman et al., paragraph 0150); and determining the number of performance clusters required based on the mean latency for the primary performance cluster (see Quarterman et al., paragraph 0158) and standard deviation of the average latencies for each of the plurality of connections(see Quarterman et al., paragraph 0150). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett, Wipfel, and Kremien to a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance cluster and standard deviation of the average latencies for each of the plurality of connections in order to accurately characterize the performance of such a large network, (see Quarterman et al., paragraph 0006).

31. Claims 20, 40, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillett Jr. et al. (6,295,585) and Wipfel et al. (6,151,688) as applied to claims 1, 21, and 41 above, and further in view of Hendricks et al. (6,463,585). Gillett Jr. et al. and Wipfel et al. teach the mentioned limitations of claim 1 above but fail to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination. However, Hendricks et al. teaches a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination (see Hendricks et al., col. 70, line 57-col. 71, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett and Wipfel to a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination in order to analyze the program watched information and marketing data 720, 722, and provide the analyzed information to the processing and editing subroutines (see Hendricks et al., col. 11, lines 26-50).

32. Claims 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillett Jr. et al. (6,295,585) and Wipfel et al. (6,151,688) as applied to claim 57 above, and further in view of VanHuben et al. (6,038,651).

33. As per claim 61, Gillett and Wipfel teach the mentioned limitations of claim 57 above but fail to teach a source device, wherein the cluster manager is configured to

create fewer performance clusters when it is determined that resource priorities are more important. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett and Wipfel to a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

34. As per claim 62, Gillett and Wipfel teach the mentioned limitations of claim 57 above but fail to teach a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gillett and Wipfel to a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are disclosed in the Notice of References Cited and teach numerous other ways of implementing systems and methods for synchronizing data between communication devices in a networked environment, thus a close review of them is suggested.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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